

## R E M A R K S

Applicant has carefully considered the Final Office Action of March 23, 2006 rejecting all of the elected claims. The Applicant appreciates the indication of allowable subject matter in claims 9, 10 and 19-22.

The present response is intended to implement the conclusions of the previous interviews, and to fully address all points of objection raised by the Examiner, and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Submitted herewith is a time extension petition.

Also submitted herewith is a Sec. 132 affidavit by the inventor.

Claims 1, 3, 11 and 13 have been previously deleted. Claims 2, 4-8, 12 and 14-18 have been previously withdrawn per the election requirement. Claim 21 has been previously added, and claims 9 and 10 were previously made dependent on it. New claim 22 was previously added, and claims 19 and 20 were made dependent on it. New claims 23-24 were previously added and have now been amended. Therefore, claims 2, 4-10, 12 and 14-24 remain pending in the case.

The present invention discloses a method and assembly for preventing unauthorized manipulation of common cylinder locks, where the manipulation is based on the Bumpkey or Blowgun methods, based on principles of the impact and momentum phenomenon.

The invention is based on a modified pin assembly which prevents impact-driven manipulation of the lock, wherein the modified pin assembly comprises a modified pin set comprising a tumbler pin and driver pin, with the modified pin set being provided with motion alteration means. The motion alteration means is adapted so as to alter the magnitude of the modified pin assembly response to an impact-driven blow applied to the tumbler pin,

relative to the magnitude of the response of the standard pin assemblies contained in the common cylinder lock.

Thus, in accordance with the invention, when the tumbler pin is linearly displaced in response to an impact-driven blow of a given intensity, a portion of the impact-driven blow intensity is transmitted to the driver pin, causing it to be linearly displaced, as well, under influence of the motion alteration means. The standard pin assemblies clear the shear line, but the driver pin of the modified pin set continues to block the shear line, thus preventing unauthorized manipulation of the cylinder lock.

Claim 23 describes the embodiment in which the motion alteration means utilizes magnetic properties that cause binding of the modified pin set (formerly claim 7).

Claim 24 describes the embodiment in which the motion alteration means utilizes modified strength properties of the biasing spring (formerly claim 8).

The Examiner has maintained his rejection of claims 23 and 24 under Sec. 102(e) as being anticipated by Stemmerik et al., or alternatively, under Sec. 103(a) as being unpatentable over Stemmerik in view of Steinbach or Bessim (claim 24), and Stemmerik in view of Raskevicius or Surko (claim 23).

The Stemmerik reference describes a cylinder lock subjected to a manipulation technique using an impact.

As discussed in the previous REMARKS filed with the Jan. 16, 2006 response, and in the previous interviews with the Examiner (March, 2005 and October 2005-with the inventor), it is Applicant's position that the Stemmerik reference contains an inaccurate description of the physical nature of the impact and its result. Due to this inaccuracy, the Stemmerik device cannot be said to reveal the approach of the present invention.

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In addition to the analysis of Stemmerik previously presented, it is deemed important to point out that Stemmerik contradicts himself in the description of the response to the impact energy, at col. 3, line 13:

"The member 11 in contact with the tumbler pin does not move....."

He then later states at col. 3, line 28:

"To increase the security against the member 11 moving in spite of the impact energy being transmitted to the movable member 10, the member 11 may have a closer tolerance (tighter fit) in the associated bore than that of the remaining driver pins. In this way a friction between this driver pin and the bore is ensured."

Thus, Stemmerik at first states that the member 11 does not move, and then he later states that friction with the bore is needed to ensure this.

By contrast, the invention does not rely on friction with the pins to achieve its goal, whereas Stemmerik does rely on this friction.

Further, Stemmerik does not disclose a "motion alteration means adapted so as to alter the magnitude of its response to an impact-driven blow applied to said tumbler pin..."

For these reasons alone, Stemmerik is inappropriate as a reference teaching.

The present invention is based on intensive research and experimentation, and amended claims 23-24 present alternative embodiments against impact-driven manipulation.

As now amended, claims 23 recites a modified pin assembly:

".....wherein said motion alteration means of said modified pin assembly comprises magnetic properties that cause binding of said tumbler pin and driver pin of said modified pin set so as to travel together in response to an applied impact-driven blow,

such that when an impact-driven blow of a given intensity is applied so as to linearly displace said tumbler and driver pins, said magnetic properties strongly bind the tumbler and driver pins together."

Similarly, claim 24 recites a modified pin assembly:

".....wherein said motion alteration means of said modified pin assembly is provided by modified strength properties of the biasing spring, to attain different response properties to an applied impact-driven blow, causing said continued driver pin blockage of the shear line."

The Stemmerik reference describes no such motion alteration means, rather, the reference describes the inaccuracy outlined above, namely, that portion 11 of the driver pin remains in place, or friction is used for this.

Therefore it is the Applicant's position that claims 23 and 24 distinguish over Stemmerik (which is deemed inaccurate), and that these claims are patentable.

Regarding claim 23, the Examiner has cited the Raskevicius and Surko patents, each for its teaching of a magnetic interlock between a driver and a tumbler pin to optimize its effectiveness against picking of the lock.

As discussed by the inventor in the attached affidavit (paras. 31-32), the use of a magnetic interlock against a manipulation technique which is not impact-based, is not a motivation to use this type of modification against an impact-driven manipulation. This is because, as stated by the inventor, the date of the Raskevicius and Surko patent applications preceded the recognition of the Bumpkey technique, and therefore they cannot provide motivation for use of a magnetic interlock as a way of interfering with impact-driven response.

Thus, neither Raskevicius nor Surko provides motivation for the impact case.

Regarding claim 24, the Examiner has cited the Steinbach or Bessim patents, each for its teaching of a modification of the strength of the biasing springs in a pin tumbler lock to optimize its effectiveness against picking of the lock.

As discussed by the inventor in the attached affidavit (para. 27), the use of different spring strengths against a conventional picking technique is not a motivation to use this type of modification against an impact-driven manipulation. This is because, as stated by the inventor, the Steinbach patent was filed before the Bumpkey technique was known, so that it cannot provide motivation for the impact case.

Similarly, the Bessim patent was filed before the Bumpkey technique was known, so that as with Steinbach, Bessim does not provide motivation for the impact case.

Thus, it would not have been obvious to one of ordinary skill in the art to have modified the pin assemblies via the biasing springs, or magnetic properties, for the impact case.

In light of the above, prior art knowledge about biasing springs and magnetic properties, as applied to pin assembly modifications, does not make it "obvious to one of ordinary skill in the art" to modify the pin assemblies for the impact case.

Therefore, it is absolutely impossible to conclude, using the cited references to Steinbach, Bessim, Raskovicus or Surko, that one of ordinary skill in the art would consider it obvious to modify the pin assemblies as a way of interfering with impact-driven response, which was not recognized as a problem at the time of these patents.

In summary, the following conclusions may be drawn:

- the Bumpkey method of lock manipulation is a serious problem;
- "picking" is a misleading term as related to an impact tool;
- Stemmerick contradicts himself in describing the pin assembly response to the impact energy of the manipulation method;
- the present invention does not rely on friction, whereas Stemmerick does rely on pin-bore friction;

- Stemmerik does not alter the response to an impact-driven blow;
- Steinbach and Bessim do not relate to impact-driven response;
- Raskevicius or Surko do not relate to impact-driven response.

As stated in the decision in *In Re Marshall*, 198 USPQ 344 (1978), "To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art...". Since the Stemmerik reference neither 1) identically describes the invention, nor 2) enables one skilled in the art to practice it, Applicant deems the 102(e) rejection improper, and respectfully requests that it be withdrawn.

Regarding the claim rejections based on Sec. 103(a), Applicant argues that the individual citations and their combination do not constitute a disclosure or teaching of the features of the claimed invention, taken as a whole.

As stated in *Application of Wesslau*, 353 F.2d 238, 241 (CCPA 1965):

"It is impermissible within the framework of Sec. 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggest to one of ordinary skill in the art."

The Examiner is relying on speculation and hindsight reconstruction of the references in view of the invention, and the Examiner is using an arbitrary combination of references.

As stated in *Grain Processing Corp. v. American Maize-Products Corp.*, 840 F.2d 902, 908 (Fed. Cir. 1988):

"Care must be taken to avoid hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit."

As stated in *In Re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998), before prior art references can be combined or modified, there must be some suggestion or motivation found in the art to make the combination or modification.

The only motivation for the combination suggested by the Examiner is provided by the Applicant's invention. The Applicant is the first to recognize the need for a pin assembly with motion alteration means capable of interfering with impact manipulation of cylinder locks.

Also, the present invention represents a solution based on the Applicant's discovery of the source/cause of a problem relating to the impact and momentum phenomenon, a problem which others had not yet defined in the context of the Bumpkey technique. Thus, the invention as a whole is to be considered non-obvious, even though the solution may be clear once the source/cause of the problem was found, see *In re Dillon*, 892 F.2d (1554, 1562, (Fed. Cir. 1989), *In re Sponnoble*, 405 F.2d 578, 585 (CCPA 1969).

In citing the references under Sec. 103(a), the question is raised whether the reference itself would suggest the invention, as stated in the decision of *In Re Lintner* (172 USPQ 560, 562, CCPA 1972):

"[are] the reference teachings... ..sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification."

Similarly, *In Re Regel* (188 USPQ 136 CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious, without some reason given in the prior art why one of ordinary skill would have been prompted to



combine the teachings of the references to arrive at the claimed invention.

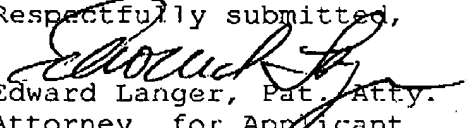
Simply put, and as stated in In re Clinton (188 USPQ 365 CCPA 1976), "do the references themselves ... suggest doing what appellants have done", such that there is a requirement that the prior art must have made any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by the Applicant that there is no reason to consider the newly cited prior art references to Steinbach, Bessim, Raskevicius and Surko, either individually or in combination with Stemmerik, as rendering the invention obvious. None of them discloses the use of a pin assembly with motion alteration means capable of interfering with impact manipulation of cylinder locks.

Therefore, independent claims 23 and 24 are deemed to be patentable.

In view of the foregoing remarks, all of the claims in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,

  
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